

Name \_\_\_\_\_

## Characteristic Properties of Matter

Using the following table, write an Evidence Based Explanation that states whether any of the liquids are the same substance.

LIQUID	DENSITY	COLOR	MASS	MELTING POINT
Liquid 1	0.93 g/cm <sup>3</sup>	No color	38 g	-98 °C
Liquid 2	0.79 g/cm <sup>3</sup>	No color	38 g	26 °C
Liquid 3	13.6 g/cm <sup>3</sup>	Silver	21 g	-39 °C
Liquid 4	0.93 g/cm <sup>3</sup>	No color	16 g	-98 °C

CLAIM: (Which liquids, if any, are the same substance?)

EVIDENCE: (Include data from the table above to support your claim. Be sure to include which specific properties support your claim AS WELL AS which properties can NOT be used to compare/identify the substances.)

REASONING: (Justify your answer by linking the claim and the evidence.

***Explain WHY*** the properties you identified count as evidence to support the claim, using appropriate scientific principles. ***Explain WHY*** the other properties can NOT be used to compare/identify the substances. You can give other examples or non-examples in your explanation.)

WRITE YOUR REASONING ON THE BACK OF THIS SHEET.